



# Phosphor Information Leaflet

## GENERAL

Name	Yttrium borate praseodymium
Chemical formula	YBO <sub>3</sub> :Pr <sup>3+</sup>
Application areas	UV Lamps for disinfection and photochemical purposes

## OPTICAL PROPERTIES

Excitation maxima @ 265 nm em.	160 nm (7.8 eV), 190 nm (6.5 eV), 250 nm (5.0 nm)
Emission maximum @ 160 nm exc.	263 nm (4.7 eV), 276 nm (4.5 eV), 300 nm (4.1 eV)
Centroid wavelength	314 nm (3.95 eV)
Full width @ half emission maximum	40 nm
Lumen equivalent	-
CIE1931 chromaticity coordinates (x, y)	-
Band edge of host lattice	6.5 eV
Reflection @ 242 nm	20 %

## PHYSICAL PROPERTIES

Body colour	White
Density	4.5 g/cm <sup>3</sup>
Refractive index (at λ)	1.51
Mineral type	Pseudo-Vaterite
Crystal system	Orthorhombic
Space group (#)	C m c m (63)

